1. (Currently Amended)  A computer-implemented multi-dimension data analysis apparatus, comprising:

a computer data store for storing input data that has dimension variables and at least one pre-selected target variable;

a decision tree processing module connected to the data store that automatically determines a subset of [[the]] dimension variables for splitting the input data, wherein the decision tree processing module generates a model that uses a competing initial splits approach to identify the subset of dimension variables that best predicts the outcome of one or more transactions represented by one or more values corresponding to the pre-selected target variable, and wherein the model specifies one or more splitting rules used to split the input data; and

~~wherein the splitting by the dimension variable subset predicts the target variable; and wherein the decision tree processing module automatically determines the subset of the dimension variables;~~

a multi-dimension viewer that generates a report using the subset of ~~determined~~ dimension variables ~~subset~~ and the split input data ~~splitting of the dimension variables~~.


2. (Currently Amended)  The apparatus of claim 1, wherein the subset of dimension variables ~~subset~~ includes continuous variables.


3. (Currently Amended)  The apparatus of claim 1, wherein the subset of dimension variables ~~subset~~ includes category-based variables.


4. (Currently Amended)  The apparatus of claim 1, further comprising:

a selector module for amending the set of ~~so that a user can alter which~~ dimension variables included ~~to include~~ in the subset.


5. (Currently Amended)  The apparatus of claim 4, wherein at least one statistic measure is generated, and wherein the static measure ~~provided to the user that~~ is indicative of how well the subset ~~splitting~~ of [[the]] dimension variables predicts the outcome ~~target variable~~.

6. (Currently Amended) The apparatus of claim 5, wherein the statistic measure is a logworth statistic measure.

7. (Currently Amended) The apparatus of claim 1, further comprising:

a selector module <u>for amending splitting</u> ~~so that a user can alter~~ values <u>corresponding to the one or more splitting rules used to split</u> ~~at which~~ the input data ~~is split by the decision tree processing module~~.

8. (Currently Amended) The apparatus of claim 1, wherein the input data set includes a plurality of dimension variables and a single <u>pre-selected</u> target variable.

9. (Currently Amended) The apparatus of claim 1, wherein the input data set includes a plurality of dimension variables and a plurality of <u>pre-selected</u> target variables.

10. (Currently Amended) The apparatus of claim 1, wherein the decision tree processing module splits the input data into groups, <u>and</u> wherein the multi-dimension viewer generates <u>the</u> [[a]] report using the groups.

11. (Cancelled).

12. (Currently Amended) The apparatus of claim [[11]] <u>1</u>, wherein <u>the model generates</u> an initial split variable<u>, and wherein the initial split variable</u> is <u>the</u> ~~indicated as~~ most important variable in predicting the <u>outcome</u> ~~target variable~~.

13. (Currently Amended) The apparatus of claim 12, wherein <u>the model generates</u> a second split variable<u>, and wherein the second split variable</u> is <u>the</u> ~~indicated as~~ second most important variable in predicting the <u>outcome</u> ~~target variable~~.

14. (Currently Amended) The apparatus of claim 1, wherein the decision tree processing module generates binary splits of the input data.

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15. (Currently Amended) The apparatus of claim 1, wherein the decision tree processing module generates splits of the input data that are other than binary splits.

16. (Currently Amended) The apparatus of claim 1, wherein the generated report is viewed substantially adjacent to the <u>subset of</u> dimension variables ~~subset~~ and the <u>split input data</u> ~~splitting values of the dimension variables subset~~.

17. (Currently Amended) The apparatus of claim 1, wherein the <u>generated</u> report has a format selected from the group consisting of<u>:</u> a textual report format, <u>a</u> tabular report format, <u>a</u> graphical report format, and combinations thereof.

18. (Currently Amended) The apparatus of claim 17<u>, further comprising:</u>
      <u>receiving a selection of</u> ~~wherein a marketing analyst selects~~ one of the report formats<u>,</u> <u>wherein the selection is received at the multi-dimensional viewer, and wherein the selection is</u> <u>used</u> ~~in order~~ to view the <u>subset of</u> ~~determined~~ dimension variables ~~subset~~ and the <u>split input data</u> ~~splitting of the dimension variables~~.

19. (Currently Amended) The apparatus of claim 18, wherein the input data includes more than fifty dimension variables, <u>and</u> wherein the <u>subset of</u> ~~determined~~ dimension variables ~~subset~~ includes less than seven dimension variables ~~that are viewed by the marketing analyst~~.

20. (Currently Amended) The apparatus of claim 1<u>, further comprising:</u>
      <u>receiving a selection of</u> ~~wherein a user selects~~ a type of summary statistics<u>, wherein the</u> <u>selection is received at the multi-dimensional viewer, and wherein the selection is used</u> to view the <u>subset of</u> ~~determined~~ dimension variables ~~subset~~ and the <u>split input data</u> ~~splitting of the dimension variables~~.

21. (Currently Amended) The apparatus of claim 1, further comprising:
      a model repository for storing a model that contains the dimension variables and splitting values of the dimension variables.

22. (Currently Amended) The apparatus of claim 21, wherein the decision tree processing module splits the input data into a first set of groups according to first splitting rules to form a first model, wherein the decision tree processing module splits different input data into a second set of groups according to second splitting rules to form a second model, and wherein the model repository includes a splitting rules index to store which splitting rules are used with which model.

23. (Currently Amended) The apparatus of claim 22, wherein the splitting rules index is searched in order to locate a model stored in the model repository.

24. (Currently Amended) The apparatus of claim 23, wherein the model repository includes a project level storage means, a diagram level storage means, and a model level storage means for storing the first and second models.

25. (Currently Amended) The apparatus of claim 22, wherein a search request is provided over a computer network to retrieve the first model from the model repository.

26. (Currently Amended) The apparatus of claim 25, wherein the computer network is an Internet network.

27. (Currently Amended) The apparatus of claim 22, wherein the model repository includes a plurality of specialty splitting rules indices that are used to locate a model stored in the model repository.

28. (Currently Amended) The apparatus of claim 27, wherein the specialty splitting rules indices are indices selected from the group consisting of: marketing specialty splitting rules indices, sales specialty splitting rules indices, and combinations thereof.

29. (Currently Amended) The apparatus of claim 22, wherein the model repository includes a mini-index means with a connection to the splitting rules index.

30. (Currently Amended) The apparatus of claim 1, wherein a data mining application provides construction of a process flow diagram, and wherein the process flow diagram includes nodes representative of the input data and a variable configuration module.

31. (Currently Amended) The apparatus of claim 30, wherein an activated variable configuration module node provides a graphical ~~user~~ interface for amending the selection of ~~within which a user can alter which~~ dimension variables included within ~~to include in~~ the subset.

32. (Currently Amended) The apparatus of claim 31, wherein the process flow diagram further includes a node representative of the decision tree processing module that includes the ~~has a~~ competing initial splits approach for determining the subset of [[the]] dimension variables.

33. (Cancelled).

34. (Currently Amended) A computer-implemented multi-dimension data analysis method, comprising ~~the steps of~~:

storing, using one or more processors, input data that has dimension variables and at least one pre-selected target variable;

automatically determining a subset of [[the]] dimension variables for splitting the input data, by generating a model that uses a competing initial splits approach to identify the subset of dimension variables that best predicts the outcome of one or more transactions represented by one or more values corresponding to the pre-selected target variable, and wherein the model specifies one or more splitting rules used to split the input data; and

~~wherein the splitting using the dimension variable subset predicts the target variable; and wherein the subset of the dimension variables is automatically determined;~~

generating a report using the subset of ~~determined~~ dimension variables ~~subset~~ and the split input data ~~splitting of the dimension variables~~.

35. (Currently Amended) The method of claim 34, wherein the subset of dimension variables ~~subset~~ includes continuous variables.

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36. (Currently Amended) The method of claim 34, wherein the subset of dimension variables subset includes category-based variables.

37. (Currently Amended) The method of claim 34, further comprising the step of:
amending the set of altering which dimension variables included to include in the subset of [[the]] dimension variables.

38. (Currently Amended) The method of claim 37, further comprising the step of:
generating providing at least one statistic measure that is indicative of how well the subset splitting of [[the]] dimension variables predicts the outcome target variable.

39. (Currently Amended) The method of claim 38, wherein the statistic measure is a logworth statistic measure.

40. (Currently Amended) The method of claim 34, further comprising the step of:
amending splitting altering values corresponding to the one or more splitting rules used to split at which the input data is split.

41. (Currently Amended) The method of claim 34, wherein the input data set includes a plurality of dimension variables and a single pre-selected target variable.

42. (Currently Amended) The method of claim 34, wherein the input data set includes a plurality of dimension variables and a plurality of pre-selected target variables.

43. (Currently Amended) The method of claim 34, further comprising the step of:
using a decision tree algorithm to determine the subset of [[the]] dimension variables by which to split the input data.

44. (Currently Amended) The method of claim 43, wherein the decision tree algorithm splits the input data into groups, and wherein the multi-dimension viewer generates the [[a]] report using the groups.

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45. (Cancelled).

46. (Currently Amended)  The method of claim [[45]] 34, wherein an initial split variable is generated, and wherein the initial split variable is the indicated as most important variable in predicting the outcome target variable.

47. (Currently Amended)  The method of claim 46, wherein a second split variable is generated, and wherein the second split variable is the indicated as second most important variable in predicting the outcome target variable.

48. (Currently Amended)  The method of claim 34, further comprising the step of:
    generating binary splits of the input data.

49. (Currently Amended)  The method of claim 34, further comprising the step of:
    generating splits of the input data that are other than binary splits.

50. (Currently Amended)  The method of claim 34, wherein the generated report is viewed substantially proximate to the subset of dimension variables subset and the split input data splitting values of the dimension variables subset.

51. (Currently Amended)  The method of claim 34, wherein the generated report has a format selected from the group consisting of: a textual report format, a tabular report format, a graphical report format, and combinations thereof.

52. (Currently Amended)  The method of claim 51, further comprising:
    receiving a selection of wherein a marketing analyst selects one of the report formats, wherein the selection is received at the multi-dimensional viewer, and wherein the selection is used in order to view the subset of determined dimension variables subset and the split input data splitting of the dimension variables.

53. (Currently Amended)  The method of claim 52, wherein the input data includes more than fifty dimension variables, and wherein the subset of ~~determined~~ dimension variables ~~subset~~ includes less than seven dimension variables ~~that are viewed by the marketing analyst~~.

54. (Currently Amended)  The method of claim 34, further comprising:

receiving a selection of ~~wherein a user selects~~ a type of summary statistics, wherein the selection is received at the multi-dimensional viewer, and wherein the selection is used to view the subset of ~~determined~~ dimension variables ~~subset~~ and the split input data ~~splitting of the dimension variables~~.

55. (Currently Amended)  The method of claim 34, further comprising ~~the step of~~:

storing a model in a model repository, wherein the model contains the dimension variables and splitting values of the dimension variables.

56. (Currently Amended)  The method of claim 55, further comprising ~~the step of~~:

storing the model in a project level storage ~~means~~, a diagram level storage ~~means~~, and a model level storage ~~means~~ of the model repository.

57. (Currently Amended)  The method of claim 55, wherein a search request is provided over a computer network to retrieve the model from the model repository.

58. (Currently Amended)  The method of claim 57, wherein the computer network is an Internet network.

59. (Currently Amended)  The method of claim 55, wherein the model repository includes a plurality of specialty splitting rules indices that are used to locate the model stored in the model repository.

60. (Currently Amended)  The method of claim 59, wherein the specialty splitting rules indices are indices selected from the group consisting of: marketing specialty splitting rules indices, sales specialty splitting rules indices, and combinations thereof.

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61. (Currently Amended)  The method of claim 34, wherein a data mining application provides construction of a process flow diagram, and wherein the process flow diagram includes nodes representative of the input data and a variable configuration module.

62. (Currently Amended)  The method of claim 61, further comprising ~~the step of~~:

        activating the variable configuration module; and

        using the activated configuration module to amend the selection of ~~node so that a user can alter which~~ dimension variables included within ~~to include in~~ the subset.

63. (Cancelled).

64. (New)  A computer-implemented multi-dimension data analysis apparatus, comprising:

        a computer data store for storing input data that has dimension variables and at least one pre-selected target variable;

        a decision tree processing module connected to the data store that automatically determines a subset of dimension variables for splitting the input data, wherein the decision tree processing module generates a model that uses a non-competing initial splits approach to identify the subset of dimension variables that best predicts the outcome of one or more transactions represented by one or more values corresponding to the pre-selected target variable, and wherein the model specifies one or more splitting rules used to split the input data; and

        a multi-dimension viewer that generates a report using the subset of dimension variables and the split input data.

65. (New)  A computer-implemented multi-dimension data analysis method, comprising:

        storing, using one or more processors, input data that has dimension variables and at least one pre-selected target variable;

        automatically determining a subset of dimension variables for splitting the input data, by generating a model that uses a non-competing initial splits approach to identify the subset of dimension variables that best predicts the outcome of one or more transactions represented by

one or more values corresponding to the pre-selected target variable, and wherein the model specifies one or more splitting rules used to split the input data; and

generating a report using the subset of dimension variables and the split input data.